

It is expected that with the Pobjoy the maximum speed will be in the neighbourhood of 135 m.p.h., and with the Gipsy Major about 150 m.p.h.

### The Transport Monoplane

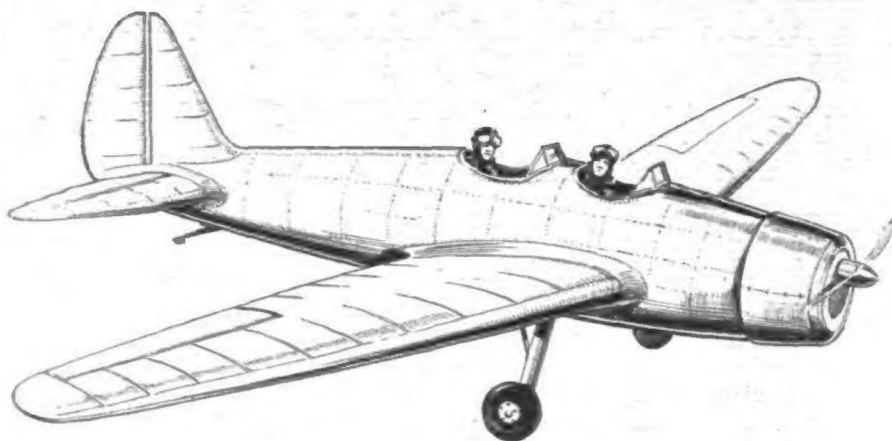
Due mainly to the incorporation of the C.L.W. type wings, the twin-engined transport monoplane is designed to carry a proportionately heavy payload, and as a result of good aerodynamic design should have a high cruising speed.

In general layout it is a twin-engined cantilever monoplane. Its tapered wings, which are of duralumin tubes and channels, have a centre section parallel in chord. Unlike the outer panels, which are fabric-covered, this section is covered with dural sheet and is filleted into the fuselage. The main spar is continuous through the fuselage, and torsional loads are taken by continuous tubes.

The fuselage, a dural monocoque structure, has frames of lipped channel section with stringers of angle section, and is covered with flush-riveted dural sheet.

The tail plane is built integral with the fuselage; the elevators and rudder have servo flaps for trimming; and control surfaces have fabric covering with leading edges and fillets of dural. Not only the main undercarriage but the tail wheel is completely retractable, the former into the engine nacelles.

Well forward in the nose is the pilot's cockpit, with windscreen of Triplex and top and sides of Rhodoid. The main seven-passenger cabin is entered from a door on the port side, and is 12ft. oin. long, 5ft. 1in. high, and has an average width of 4ft. 4in. Behind this is a lava-



An artist's conception of the little Pobjoy-engined C.L.W. trainer now "on the stocks."

tory of 45 cu. ft. capacity. Yet further aft is the luggage compartment (capacity 34 cu. ft.).

Originally the C.A.1 was designed to take the 270 h.p. Siddeley Cheetah V radial of 270 h.p., and with two of these units the estimated speed at sea level is 209 m.p.h. With the 290/320 h.p. moderately-supercharged Cheetah IX, the maximum speed at altitude should be considerably increased. The unsupercharged engines should give a cruising speed of 203 m.p.h.

The main dimensions are: Span, 52ft.; length, 32ft. 3in.; height, 10ft. oin. The tare weight is 3,152 lb., and fully loaded the machine weighs 6,100 lb., or 6,400 lb. in "overload" condition. The wing loading is 21.3 lb./sq. ft.

## A HISTORICAL SUMMARY

IT was surprising to see the number of members of the Royal United Service Institution who assembled on Tuesday (an unusual day for a lecture) of last week to hear Sir Francis Sheldermine read a paper on the "Development of Civil Aviation." Though the subject had nothing to do with the fighting services, it is evidently one in which the members of the Institution take a keen interest, and on which they are anxious for the latest information. Lord Swinton took the chair, but was obliged to leave before the end of the paper to attend to his other duties.

The Director of Civil Aviation read a paper which recounted and summarised the developments in civil and commercial flying during the past four years. He dealt with the difficulties which confront the operators of internal air lines, and admitted that he was afraid all except a few of them were losing money. The choice of unsuitable routes was mainly the cause of failure. The average journey speed on our internal air services was 43 m.p.h. If the forty-five minutes now taken in driving from Victoria to Croydon could be reduced to fifteen minutes, it would be equivalent to increasing the cruising speed of aircraft on the London-Paris route from 160 to 260 m.p.h.

As regards external air services from this country, Sir Francis gave a useful, and, in fact, masterly summary of the developments of the last four years, and of the plans for the future. It is not necessary to repeat the details here as they have all been chronicled in *Flight*, but they were evidently of great interest to the audience, and it was certainly impressive to hear all the happenings and plans thus collected into one paper. One interesting comparison may be instanced. Last year Pan American Airways carried nearly twice as many passengers as did Imperial Airways, but the latter carried nearly three times as many tons of air mail in and out of this country compared with Pan American Airways' operations in and out of the United States.

Sir Francis mentioned that travel by air to Capetown is at a speed of nearly 40 m.p.h. as compared with 19 m.p.h. by boat, and the extra cost is about £5 10s. per day saved. From London to Singapore the air journey averages over 40 m.p.h. and the boat about 13 m.p.h., while the extra cost is about £3 15s. for each day saved. For the Atlantic crossing three

types of aircraft were being developed, the Short flying boat, the Mayo composite aircraft, and high-speed landplanes, of which two were on order, which would be capable of operating the service during the summer and possibly even during the winter. Sir Francis said that he had not even a drawing of these landplanes to show his audience.

The discussion which followed showed the interest taken by the audience, and also suggested the desirability of constantly repeating to the public what is taking place in the aeronautical world.

### Hungarian Holiday

ALL private owners should make a note of the fact that the Third Magyar Pilots Picnic (Hungarian Pilots Picnic) will be held in Hungary this year from June 13 to 19.

As its name implies, this event does not entail strenuous or competitive flying, and the sole object of the organisers is to ensure that participants shall have an interesting and enjoyable holiday. Further details will be published in due course.

### Royal Aero Club A.G.M.

THE annual general meeting of the Royal Aero Club will be held at the club premises, 119, Piccadilly, London, W.1, next Wednesday, March 25, at 6.30 p.m.

The agenda is as follows: (1) Chairman's report. (2) To elect president and vice-presidents. (3) To elect committee.

The following are recommended by the committee for the presidency and vice-presidencies: President, the Duke of Atholl, K.T., G.C.V.O., C.B., D.S.O.; vice-presidents, the Duke of Sutherland, K.T.; the Marquess of Londonderry, K.G., M.V.O.; Viscount Wakefield of Hythe, C.B.E., L.L.D.; Lord Gorell, C.B.E., M.C.; Lt.-Col. M. O'Gorman, C.B.

The following nine members have been nominated to the nine vacancies on the committee: Major C. J. W. Darwin, D.S.O.; W. Lindsay Everard, M.P.; Major A. Goodfellow; A. C. S. Irwin; the Marquess of Londonderry, K.G., M.V.O.; Major R. H. Mayo, O.B.E.; Lieut.-Col. J. T. C. Moore-Brabazon, M.C., M.P.; Lieut.-Col. M. O'Gorman, C.B.; Major H. A. Petre, D.S.O., M.C.